



STATE OF MARYLAND

DMMH

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January 21, 2011

Public Health & Emergency Preparedness Bulletin: # 2011:02 **Reporting for the week ending 01/15/11 (MMWR Week #02)**

CURRENT HOMELAND SECURITY THREAT LEVELS

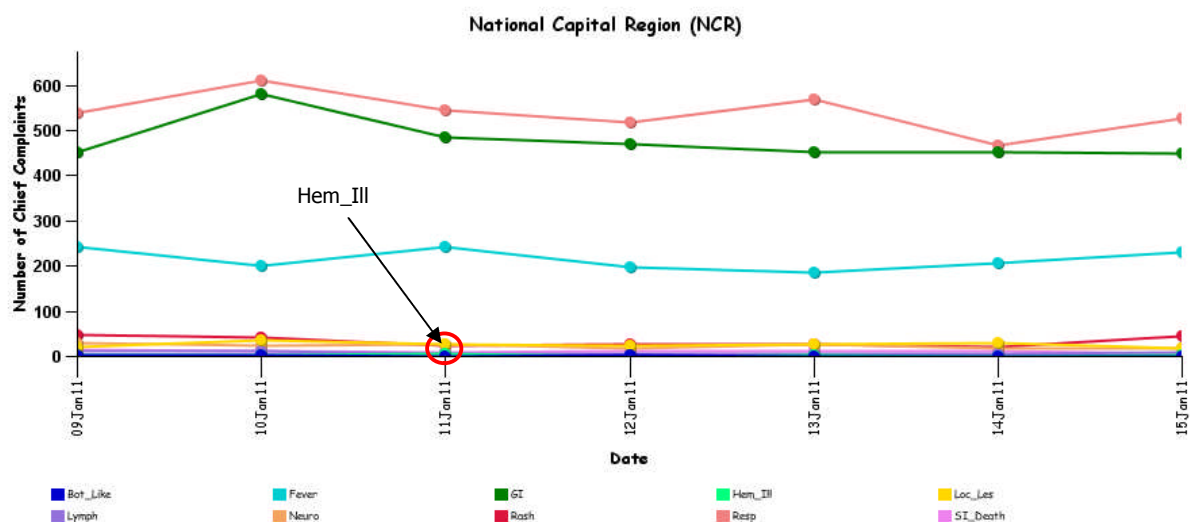
National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

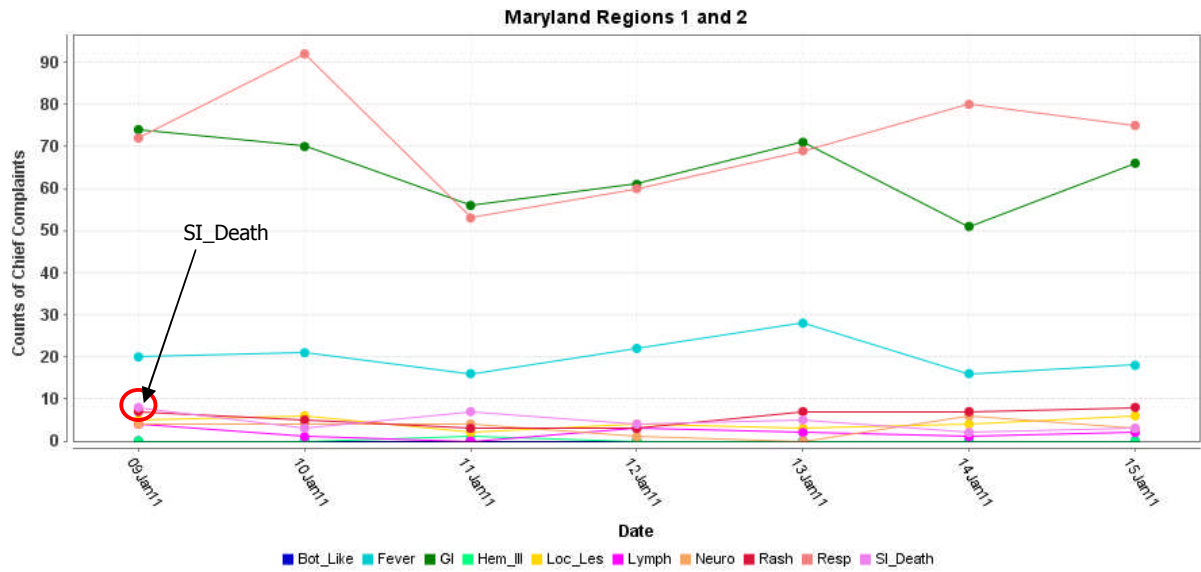
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

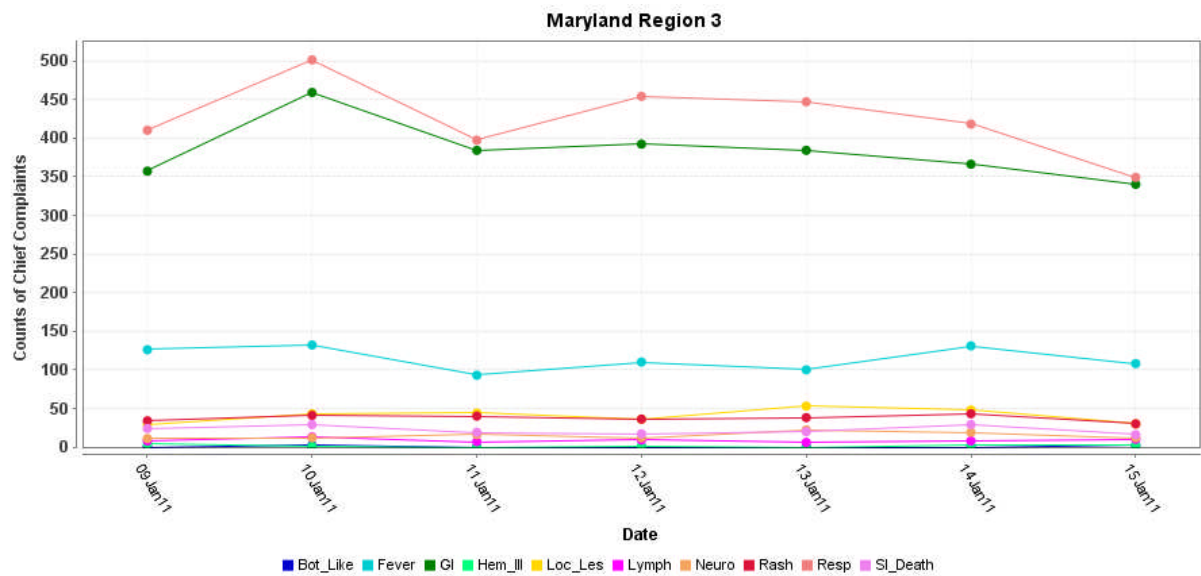


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

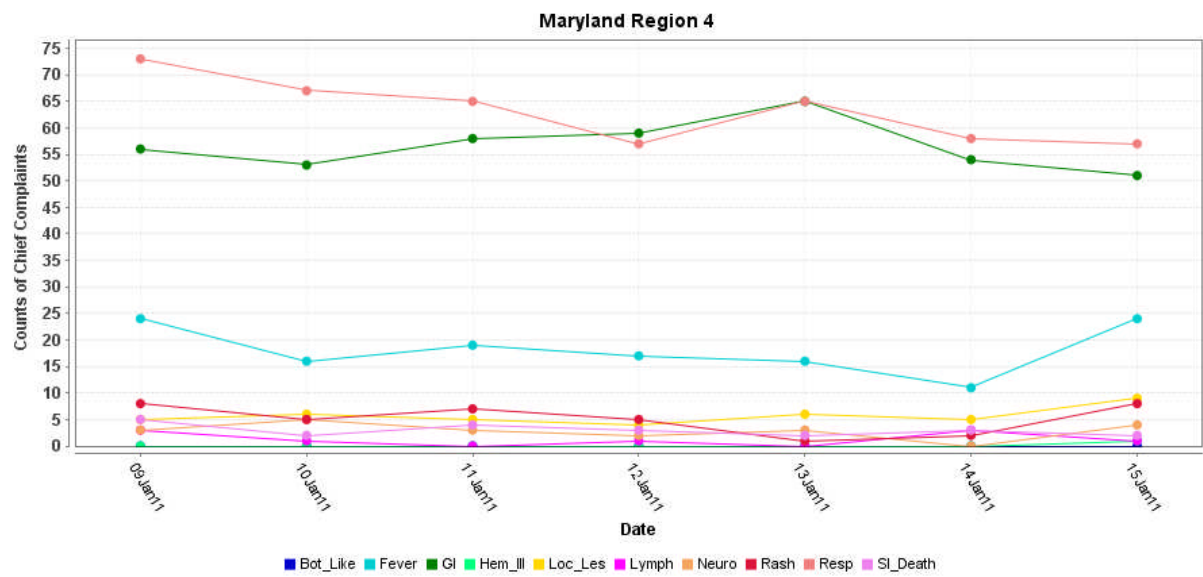
MARYLAND ESSENCE:



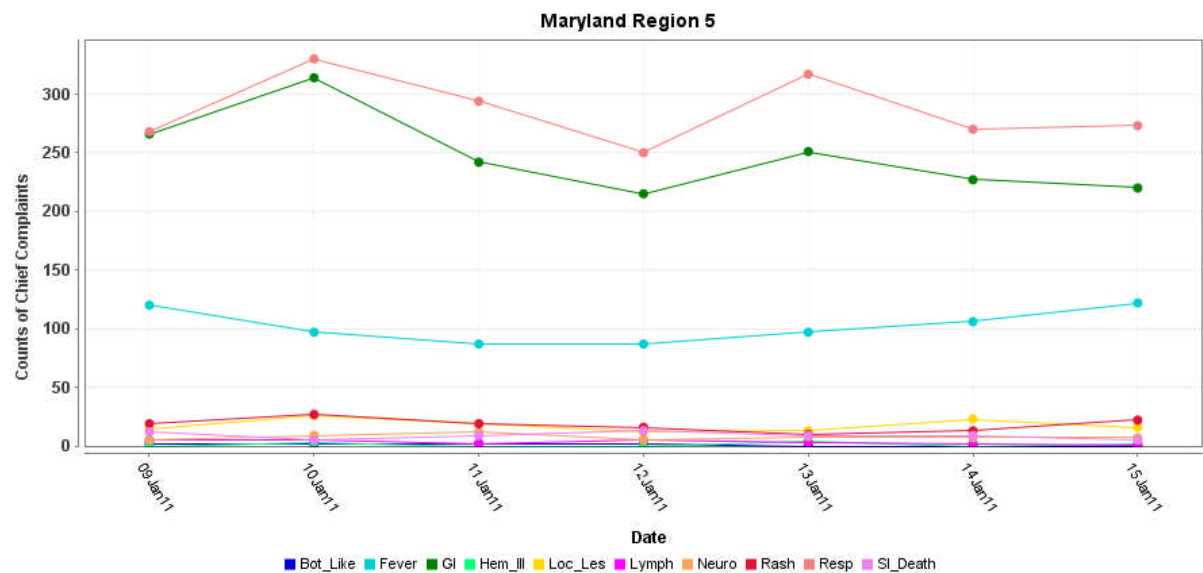
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

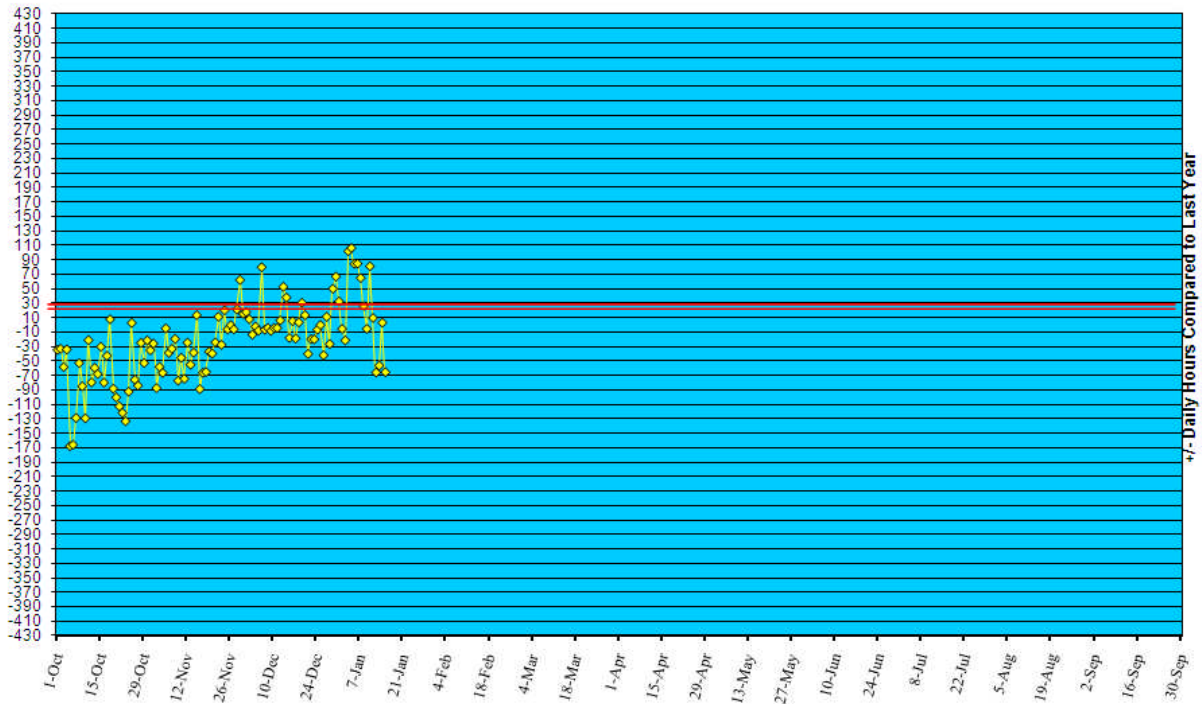


* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/10.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '10 to January 15, '11



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in December 2010 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (January 9 – January 15, 2011):	16	0
Prior week (January 2 – January 8, 2011):	8	0
Week#2, 2010 (January 10 – January 16, 2010):	17	0

Sixteen outbreaks were reported to DHMH during MMWR Week 2 (January 9 – January 15, 2011):

7 Gastroenteritis outbreaks

4 outbreaks of GASTROENTERITIS in Nursing Homes
2 outbreaks of GASTROENTERITIS in Assisted Living Facilities
1 outbreak of GASTROENTERITIS in an Adult Daycare

9 Respiratory illness outbreaks

2 outbreaks of INFLUENZA in Nursing Homes
2 outbreaks of ILI/PNEUMONIA in Nursing Homes
2 outbreaks of PNEUMONIA in Nursing Homes
1 outbreak of STREPTOCOCCAL PHARYNGITIS in a Hospital
1 outbreak of RSV in a Residential Facility
1 outbreak of RSV in a Daycare

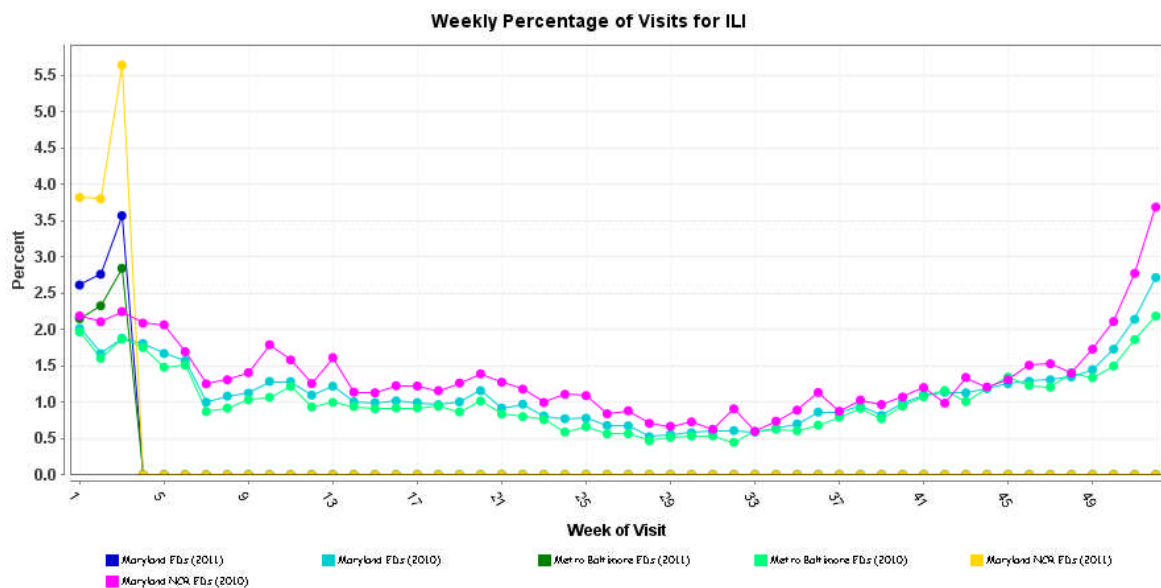
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity was WIDESPREAD for Week 2.

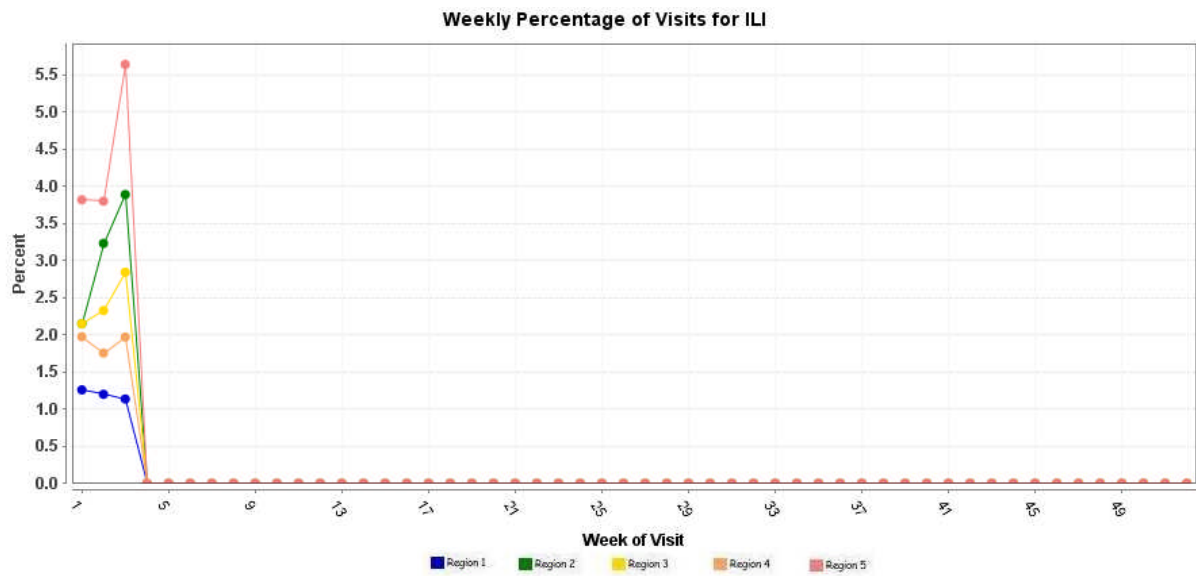
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.

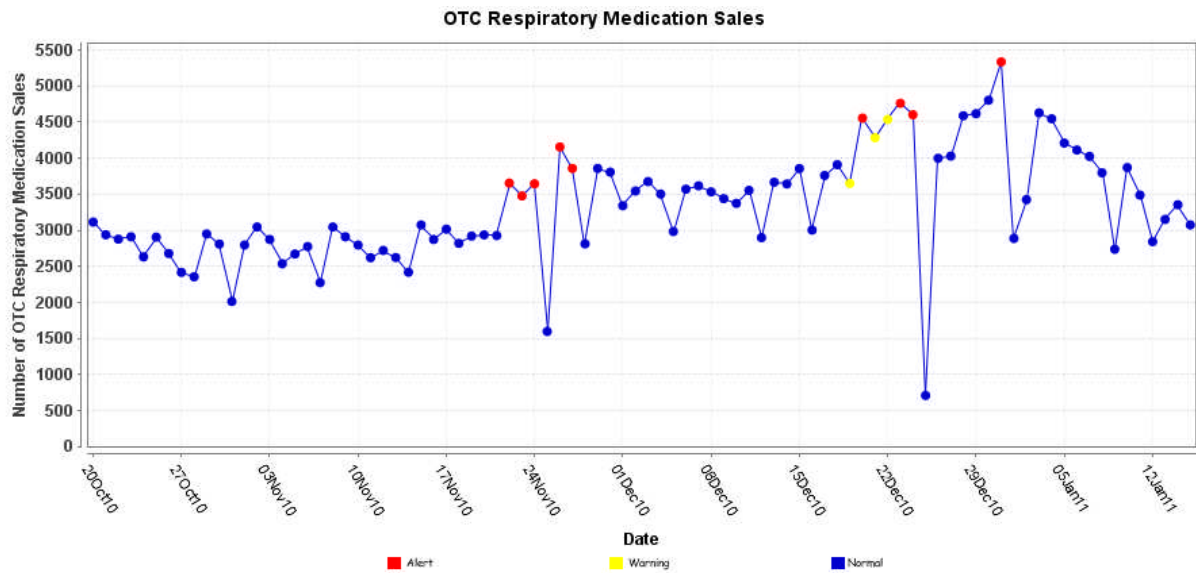


* Includes 2010 and 2011 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of January 13, 2011, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 517, of which 307 have been fatal. Thus, the case fatality rate for human H5N1 is about 59%.

AVIAN INFLUENZA, HUMAN (EGYPT): 13 January 2011, The Ministry of Health of Egypt has announced a new case of human infection of H5N1 avian influenza. A 10 year old boy from Giza Governorate developed symptoms on 5 Jan 2011 and was hospitalized on 8 Jan 2011. He is in a stable condition. Investigations into the source of infection indicated that the case had exposure to poultry. The case was confirmed by the Egyptian Central Public Health Laboratories, a National Influenza Center of the WHO Global Influenza Surveillance Network (GISN). Of the 120 cases confirmed to date in Egypt, 40 have been fatal. The case described in the present report represents the 1st case confirmed in 2011 and the 120th case overall since the outbreak began in 2006.

AVIAN INFLUENZA, DOMESTIC DUCK, SPREAD (SOUTH KOREA): 12 January 2011, On Tuesday [11 Jan 2011], 6 duck farms in Naju and Yeongam County, South Jeolla Province, were found to be affected by highly pathogenic strains of avian influenza. The Food, Agriculture, Forestry and Fisheries Ministry said suspected cases of bird flu at 3 duck farms in Naju and 3 others in Yeongam were found to be those of the deadly strain of avian influenza. Suspected cases were also reported in Suncheon, South Jeolla Province. With 13 farms affected by bird flu in the province, the number of birds culled surpassed 800 000. A quarantine official said, "We are making every effort to prevent the virus that has already affected South Jeolla Province from spreading to other regions."

AVIAN INFLUENZA, DOMESTIC DUCK, SPREAD (SOUTH KOREA): 12 January 2011, Bird flu is spreading northward to Seoul and metropolitan areas from central parts of the country. The National Veterinary Research and Quarantine Service (NVRQS) confirmed Monday [10 Jan 2011] that ducks at a farm in Anseong, Gyeonggi Province, and another farm in Naju, South Jeolla Province, tested positive for the virulent strain of H5N1 avian influenza. Anseong was the 3rd region to be hit by the disease since 29 Dec 2010, with previous cases breaking out in Cheonan, South Chungcheong Province, and Iksan, North Jeolla Province. The avian flu outbreak was confirmed at 10 poultry farms in these provinces, with an additional 10 farms having reported suspected cases of the highly contagious bird disease. Some wild birds in South Gyeongsang Province were also found dead from H5N1 [virus infection]. Upon the news that the bird disease is spreading, quarantine officials are in a plight, as they have already been fighting FMD.

NATIONAL DISEASE REPORTS

E. COLI VTEC NON-O157, SMOKED MEAT, ALERT, RECALL (USA): 09 January 2011, Three new cases of E. coli-related illness have been traced from Michigan back to a Wausau butcher shop in which an outbreak 1st was reported just before Christmas 2010. The illnesses bring to 7 the number of people sickened by E. coli-infected smoked meat products produced at Zillman Meat Market in late 2010, the Marathon County Health Department said Tuesday [4 Jan 2011]. The department also expanded its advisory on smoked meats produced at Zillman's to between 30 Sep and 23 Dec 2010, rather than beginning on 13 Nov 2010, because the department still has not pinned down the source of the bacteria. While the 3 cases announced are new, they are related to the prior 4 illnesses and involve some of the same people, said Judy Burrows, the Health Department's chronic disease prevention director. "The folks we know from Wausau who were sick had shared some of their smoked meat products with others from Michigan," Burrows said. The Health Department advises that any ready-to-eat smoked meat produced at Zillman's within the advisory range be thrown away, or that customers contact Zillman's about returns. The advisory relates only to the smoked meat, and none of Zillman's other meat products were included in the advisory. Since the initial advisory on 22 Dec 2010, Zillman's has thoroughly cleaned all of its equipment, Burrows said. "There are no additional steps Zillman needs to take because these new cases happened prior to all of the cleaning, so they're good to go," she said. Burrows said the Health Department still is trying to pin down whether the E. coli contamination came from a person or somehow ended up on Zillman's equipment. She also said very few people came forward with tales of sickness from the smoked meat after 3 news releases were issued in December 2010, hampering the investigation on how and when the contamination 1st occurred. Less information means the Health Department must cast a wider net with its advisory, Burrows said. Burrows said the Michigan cases were discovered after the Wisconsin Department of Health Services contacted other state health departments in search of illnesses caused by this particular bacterial strain, E. coli O45, because it is a newer, slightly different form of bacteria studied for only about 10 years. Tim Monson, a microbiologist with the Wisconsin State Lab of Hygiene, said Tuesday [4 Jan 2011] that E. coli O45 is an "emerging pathogen" that can transfer its toxins to other bacteria, but it also tends to be less toxic than other strains of E. coli. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS, SEROTYPE I 4,5,12,i-, SPROUTS (USA): 09 January 2011, CDC is collaborating with public health officials in many states and the FDA to investigate a multistate outbreak of Salmonella serotype I 4,[5],12:i:- infections. Investigators are using DNA analysis of bacteria obtained through diagnostic testing to identify cases of illness that may be part of this outbreak. From 1 Nov 2010 through 4 Jan 2011, 112 individuals infected with the outbreak strain of Salmonella [enterica] serotype I 4,[5],12:i:-, whose illnesses began (onset dates) since 1 Nov 2010, have been reported from 18 states and the District of Columbia. The number of ill persons identified in each state and the District of Columbia with the outbreak strain is as follows: California (1), Colorado (1), Connecticut (1), District of Columbia (1), Georgia (1), Hawaii (1), Iowa (1), Illinois (59), Indiana (10), Kentucky (1), Massachusetts (2), Missouri (22), New York (1), Pennsylvania (3), South Dakota (1), Tennessee (1), Texas (1), Virginia (1), and Wisconsin (3). Among 111 persons for whom information is available, illness onset dates range from 1 Nov 2010 to 24 Dec 2010. Case-patients range in age from 1 to 75 years-old, with a median age of 28 years-old. 75 patients (or 68 percent) are female. Among persons with available information, 24 percent reported being hospitalized. No deaths have been reported. Because the pulsed-field gel electrophoresis (PFGE) pattern associated with this particular Salmonella serotype commonly occurs in the USA, some of the cases identified may not be related to this outbreak. Collaborative investigative efforts of local, state, and federal public health and regulatory agencies have linked this outbreak to consumption of Tiny Greens Alfalfa Sprouts and Spicy Sprouts (which contain alfalfa sprouts mixed with radish and clover sprouts). The sprouts were distributed to various customers, including farmers' markets, restaurants and groceries in Illinois, Indiana, Iowa, and Missouri, and may also have been distributed to other Midwestern states. Approximately half of the illnesses occurred in Illinois, where many of the ill individuals ate sandwiches containing sprouts at various Jimmy John's outlets. Jimmy John's restaurants have voluntarily suspended serving sprouts at their Illinois franchise locations. The FDA and the state regulatory agency conducted an inspection, including sample collections, at Tiny Greens Organic Farm. The investigation on how contamination may have occurred is continuing. This investigation is ongoing. CDC, FDA, and state and local public health partners are continuing surveillance to identify new cases and trace potentially contaminated products. CDC will continue to update the public on the progress of this investigation as information becomes available. Since 1996, there have been at least 30 reported outbreaks of foodborne illness associated with different types of raw and lightly cooked sprouts. Most of these outbreaks were caused by Salmonella and E. coli infections. Recently, Tiny Greens Organic Farm of Urbana, Illinois, announced a recall of specific lots of Alfalfa Sprouts and Spicy Sprouts because they have the potential to be contaminated with Salmonella. Product was distributed through various distributors in Illinois, Indiana, and Missouri and could have ended up in restaurants and supermarkets near those areas. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS

LEGIONELLOSIS (AUSTRALIA): 15 January 2011, There have now been 10 laboratory-confirmed cases of legionnaires' disease due to Legionella pneumophila serogroup 1 infection diagnosed in Australians who have returned from holidays in Bali, Indonesia, in the period between August and December 2010. 5 cases (2 from the state of Western Australia and 2 from the state of Victoria) were holidaying in Bali in the last half of December 2010, with dates of onset of illness between 16 Dec 2010 and 1 Jan 2011. The 10 cases have been aged between 41 and 82 years (median 55 years), and nearly all have been severely ill with pneumonia, requiring ICU treatment. Most, but not all, have had identified risk conditions, such as smoking, diabetes, or possible case died in Bali from an undiagnosed pneumonia. Notably, 9 of the 10 confirmed cases stayed at the same hotel, which is situated in the central area of Kuta in Bali. We understand that environmental investigations undertaken previously at and in the vicinity of this hotel have not identified a specific source, but further investigations are under way. Clinicians should consider the diagnosis of legionnaires' disease in people with consistent illnesses who have returned recently from Bali. If cases are identified, I would be interested to hear of this, and Indonesian health authorities should also be advised through official channels. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

HANTAVIRUS (BRAZIL): 15 January 2011, The Regional Directorate of Health (GRS) has recorded an increase of hantavirus [infection] cases in the region [Minas Gerais state], which covers 27 municipalities in the greater Triangulo Sur region. The increase has been seen especially in women, with an increase of close to 20 per cent in deaths from the disease. In Uberaba, although not considered an outbreak area, there was one confirmed [case] without recovery in 2010. According to Marcia Maria de Souza, in the GRS technical report for 2009, there were 6 confirmed cases in the region, of which 2 died, and one reported non fatal case in Uberaba. The index of cases that presented with complications and did not recover were 33 per cent. Among these cases, just one woman was infected and the municipalities that registered the greatest incidence were Ibia and Araxa, both with deaths. In 2010, the GRS reported 14 confirmed cases of the disease, 3 of whom were women. 50 per cent died. Araxa was the municipality most affected, with 4 cases and 2 deaths. Uberaba reported only one fatal case. The number of patients who live in urban areas, go to rural areas for work or recreation, and become infected [there] is significant, the report stated. The evaluation of the technical report shows that some factors have contributed to the increase in cases in the region. "These municipalities suffer considerably from the rotation of health professionals and physicians. Because of this, the recommendation is that the professionals always be alerted to the presence of hantavirus when they arrive in an area where there have been cases of infection. We ask that the municipalities train their health workers for the distribution of information about the disease in rural and urban areas in the region," stated Marcia, who also added that it is important that the people take preventive measures. (Emerging Infectious Diseases are listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

HANTAVIRUS (CHILE): 11 January 2011, The Regional Secretariat of Health confirmed that the death of a patient this past Tuesday [4 Jan 2011] in the Puerto Montt Base Hospital was due to [a] hantavirus [infection]. The man was a 43 year old farmer who was cutting firewood with his 55 year old brother in the rural area of Caracol, Los Muermos. According to the El Llanquihue newspaper, confirmation of this case was received through the Epidemiological Bulletin on Hantavirus [infection] of the Ministry of Health, which reports the situation as of 7 Jan 2011. . (Emerging Infectious Diseases are listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

YELLOW FEVER (UGANDA): 11 January 2011, Close to 50 people have died [from yellow fever virus infections; YF] with another 190 infected in the past couple of weeks since the disease was first detected. Even as Uganda struggles to cope with an outbreak of yellow fever, some conmen are selling vaccination cards to people who have not been vaccinated, a Daily Monitor investigation has shown. At the South African embassy for example, 6 out of 10 yellow cards presented as part of requirements for visa applications, are found to be fake --creating the risk of the disease being spread to countries not infected. At Kampala City Council Hospital, just next to the imposing White Hall that houses the council's offices, the illegal trade in yellow fever cards is lucrative and bustling. The "hawkers", casually dressed unlike their tattered-trouser donning counterparts downtown, are busy; hovering in the hospital compound on the look-out for clients to buy the vaccination cards at a give-away price. Under normal circumstances, vaccination and a card for proof costs Shs 46,000 [USD 19.64] at this facility - -but if you bargain with these "hawkers", you could get one for as low as Shs 15,000 [USD 6.40], without even being vaccinated. Our reporter was charged Shs 25,000 [USD 10.57] for the card. The South African high commissioner to Uganda, Mr Jon Qwelane, says the black market in vaccination cards is a serious problem. He does not just fear the spread of the disease to his country but the blatant abuse of ethical standards of disease control. Of the 53 countries in Africa, 39 are at a high risk of transmitting yellow fever [virus], including Uganda. (Viral Hemorrhagic Fever is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

ANTHRAX, HUMAN, BOVINE (RUSSIA): 09 January 2011, An emergency situation has been announced in one of the farms of the Gorodovikskoe rayon of Kalmykia because of anthrax. Tests on the samples from one of the slaughtered cows confirmed the presence of anthrax. 12 contact persons are in the hospital now. A similar outbreak occurred in the village of Uspenskaya of Beloglinskaya rayon during the fall [2010], when 3 cows fell ill because of anthrax, and 19 other cows were culled. As of 29 Sep 2010, 8 people had been admitted to the hospital with the skin form of anthrax. However, none of the human cases were laboratory confirmed. (Anthrax is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

TRICHINELLOSIS (UKRAINE): 09 January 2011, Three people in the Novoselytsia Kelmetzkoho district of Bukovina were taken to the infectious disease department of the local hospital with a diagnosis of trichinosis. Their condition is satisfactory. In the Novoselytsya Kelmenetsky district, where the detected cases of trichinosis live, employees of the State Board of Veterinary Medicine of Ukraine have taken blood samples from pigs, dogs, and cats to try and determine the source of infection. According to the State Veterinary Medicine Committee, on 6 Jan 2011, laboratory testing was conducted on blood samples from injured dogs and hunters in the village. Nobody was found infected. Veterinary and laboratory workers with veterinary and sanitary expertise are working to ensure that animal products are allowed into markets only after a veterinary-sanitary examination for trichinosis. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmd.maryland.gov/>

Maryland's Resident Influenza Tracking System: <http://dhmd.maryland.gov/flusurvey>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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